

REMARKS

In paragraph 3 of the Office Action of October 2, 2008, claim 8 was rejected under 35 U.S.C. 112, second paragraph.

In response to the rejection over claim 8, claim 8 has been amended to further clarify the feature of the invention to obviate the rejection.

Further, in paragraph 7 of the Action, claims 1 through 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Masaoka et al. (JP 2003-328151) in view of Tashiro et al. (JP 2003-071980).

In response to the rejections, claim 1 has been amended to include a limitation recited in claim 2, and claims 3-7 have been amended to correct clerical errors. Claims 2 and 9-12 have been canceled. Claims 13-18 have been newly filed. The specification has been amended to correct a clerical error.

With respect to the rejection over claim 1, as recited in claim 1 of the invention, a coated metal formed article comprises a metal formed article, a zinc-containing porous coating layer laminated on a surface of the metal formed article, a phenol-modified silicon compound layer laminated on the zinc-containing porous coating layer, and a fluorine resin-containing layer laminated on the phenol-modified silicon compound layer. The fluorine resin-containing layer contains a fluorine resin and at least one organic resin selected from a polyester resin, a polyacryl resin, a polyolefin resin, a polyurethane resin, and a polycarbonate resin. An amount of the fluorine resin added is in a range of 1 to 200 parts by weight with respect to 100 parts by weight of the organic resin. When a thickness of the phenol-modified silicon compound layer is t_2 (μm) and a thickness of the fluorine resin-containing layer is t_1 (μm), a ratio of t_1 to t_2 is in a range of 0.05 to 50 so that dimensional accuracy and mechanical properties are increased.

Masaoka is shown as one of the conventional art in the specification of the present invention. Masaoka, as indicated in the Action, does not explicitly or implicitly disclose the use of fluorine resin-containing layer.

Masaoka discloses a corrosion resistant iron material which has high rust preventability without using and containing harmful chromium based compounds. The rust preventive coating composition containing (a) a compound having a phenolic hydroxy group and (b) one or more kinds of compounds selected from the group of silicates and the salts of silicic acid and having a siloxane bond and/or their condensations as essential components is applied to the surface of an iron material whose surface is coated with an undercoating agent essentially consisting of at least one kind of metal selected from zinc and aluminum, and hardening is caused by room temperature treatment or heating treatment, so that a corrosion resistant iron material is produced.

However, as shown in one of the conventional art in the present application, Masaoka does not disclose the fluorine resin-containing layer.

In other words, Masaoka is supposed to be a start point of the present invention, and accordingly it can be said that such reference would not make the present invention obvious.

Furthermore, since Masaoka obviously does not disclose the fluorine resin-containing layer, it is natural that Masaoka does not disclose the specific ratio of t1 and t2 as recited in claim 1.

Needless to say, the effect shown in Fig. 2 of the present invention is not disclosed or suggested in Masaoka, and it would not be obvious to one with ordinary skill in the art that the specific ratio of t1 and t2 critically improves the anti-rust property.

Furthermore, Masaoka, unlike Fig. 3 of the present invention, does not disclose anything about the fluorine resin content (0.1-200 parts by weight) in the fluorine resin-containing layer.

Therefore, Masaoka corresponds to the comparative example (no fluorine resin-containing layer is laminated). Accordingly, it is apparent that Masaoka, where the objectives of the invention are not obtained, cannot be a reference for the purpose of the obviousness rejection.

Tashiro was cited to disclose a fluoresein/organic resin mixture layer. Tashiro basically discloses a fluoroplastic coated steel sheet which is not easily impaired or pressure-marked or does not slip easily.

Further, it is disclosed, in Tashiro, that the coated steel sheet uses aluminum-Zn alloy-plating steel plate as a substrate. An under coat including a rust preventive pigment is formed on the substrate. On this under coat, a finishing coat is formed. The finishing coat includes a fluoro-resin, an acrylic resin system and a ceramic fiber.

However, even though Tashiro has the finishing coat containing the fluoro-resin, a chromate treatment is applied to a substrate before painting the under coat. The under coat also includes the chromic material which the present invention avoids to use due to one of the purposes of the present invention.

Therefore, Tashiro's invention is regarding a fluoro-resin coated steel manufactured by an extremely environmentally problematic surface treatment technology.

With respect to the ceramic fiber, it is disclosed that, in paragraph [0018] of Tashiro, the length of the ceramic fiber is 2-5 micrometers, and the diameter of ceramic fiber is 5-150 micrometers. It is also disclosed that such ceramic fiber makes the finish coating film surface coarse. This feature of the finishing coat in Tashiro undermines the effects of the dimensional accuracy

and the mechanical properties obtained in the present invention. Thus, the finishing coat in Tashiro would not be appropriate for the purpose of the present invention.

As to the under coat, Tashiro discloses an acrylic resin and a urethane resin as a material for the under coat. However, Tashiro, unlike the present invention, does not disclose the phenol-modified silicon compound at all.

Furthermore, Since Tashiro does not disclose the phenol-modified silicon compound layer, it is natural that Tashiro, unlike the present invention, does not disclose the specific ratio of t_1 and t_2 .

Needless to say, the effect shown in Fig. 2 of the present invention is not disclosed or suggested in Tashiro.

Furthermore, Tashiro, unlike Fig. 3 of the present invention, does not disclose the fluorine resin content (0.1-200 parts by weight) in the fluorine resin-containing layer.

Therefore, Tashiro corresponds to the comparative example (wherein the chromic material is used; the dimensional accuracy and the mechanical properties are decreased; and the phenol-modified silicon compound is not used). Thus, it is apparent that Tashiro also cannot be a reference for the obviousness rejection.

For the reasons stated above, configurations and objectives in Masaoka and Tashiro are significantly different in a sense that Masaoka employs no chromic material while Tashiro basically does.

Therefore, Masaoka and Tashiro cannot be combined to make the *prima facie* obviousness rejection over the claim 1 in the invention due to such differences explained above.

With respect to the rejection over claim 8, as is obvious from the explanation above, Masaoka does not disclose the step for forming the fluorine resin-containing layer, or the specific ratio of t_1 and t_2 , or the effect shown in Fig. 2 of the present invention. Furthermore, Masaoka, unlike Fig. 3 of the present

invention, does not disclose anything about the fluorine resin content (0.1-200 parts by weight) in the fluorine resin-containing layer.

Also, Tashiro does not disclose the step for forming the phenol-modified silicon compound layer, or the specific ratio of t1 and t2, or the effect shown in Fig. 2 of the present invention. Furthermore, Tashiro, unlike Fig. 3 of the present invention, does not disclose the fluorine resin content (0.1-200 parts by weight) in the fluorine resin-containing layer.

Also, the finishing coat in Tashiro includes a ceramic fiber. As stated above, the ceramic fiber would undermine the essential effects of the present invention.

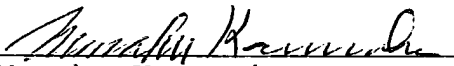
In addition to the differences stated above, configurations and objectives in Masaoka and Tashiro are significantly different in a sense that Masaoka employs no chromic material while Tashiro basically does.

Therefore, Masaoka and Tashiro cannot be combined to make the *prima facie* obviousness rejection over the claim 8 in the invention due to such differences explained above.

Accordingly, claims 1 and 8, and all pending claims depending from claims 1 and 8 should stand allowable over the cited references.

Reconsideration and allowance are earnestly solicited.

Respectfully Submitted,

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